SHIVAKI®

µC Based PID or On/Off Temperature + Timer Controller _LCD Indication
Universal input

MODEL NO: (LT-906)

Features :-

- Microcontroller based, 16x2 LCD display
- Supply 220 V Ac
- Input J,K or RTD selection
- Output: 1. Relay Contact or SSR, 2. Alarm contact or Buzzer
- PID or On/Off Control selection
- Heating or Cooling Application selection
- Range: J type 0-750c,
- K type 0-1200c,
- RTD.1 type -50.0 to 400.0,
- RTD type 0 to 400
- Temperature As per range adjustable in set mode.
- Alarm 0.0 to 25.0 or 0 to 250 as per range adjustable
- Ct 1 to 60 for ssr output & 10 to 120 second for Relay output adjustable
- Auto tuning require for pb, It & dt value
- Auto tuning Hysteresis adjustable.
- Hysteresis 0.2 or 2 to 25.0c or 25c adjustable as per range selection for RTD
- Hysteresis 2 to 250c adjustable as per range selection for J & K Type
- Delay 0 to 250 second adjustable for cooling control
- OPEn display if Sensor break & -rEV display if connections reverse.
- Relay trip if sensor breaks, connection open or connection reverse.
- Calibration Error correction by front key switch (No preset setting)
- Real Time clock Indication.
- Delay start as per RTC setting (with Enable/Disable)
- Off line data logging time O to 250 Minute settable
- RS485 Output Enable/Disable function
- Off Line data storage up to 2047 Data
- Soak time

Key Function

- You can go in set mode by SET key
- You can change setting in set mode by Increment & Decrement key
- Enter key to store all set value in memory
  - Mute key to mute Alarm

Setting : Mode Selection
You can change **All value** by Increment & Decrement key
Press Enter key to exit & save from any step else go to next step

- Press **SET** key to set Mode = Set Temperature
- Soak time (minute)
- Press Increment key for Mode = Set Alarm
- Press Increment key for Mode= Control Para. meter
- Press Increment key for Mode= Delay Start Time
- Data logging
- Press Increment key for Mode= RTC

You can go back to select any mode by pressing Decrement key
You can select any mode by pressing set key

Setting : Mode : Set Temperature
You can change **All value** by Increment & Decrement key
Press Enter key to exit & save from any step else go to next step

- Press **SET** key to Set Temperature
  Display = **Set Point** & Last set value
  Press up key
  Display =set soak time
- Press enter key to save & Exit

Setting : Mode : Set Alarm
You can change **All value** by Increment & Decrement key
Press Enter key to exit & save from any step else go to next step

- Press **SET** key to Set Alarm High
  Display = **Alarm High** & Last set value
- Press **SET** key to Set Alarm Low
  Display = **Alarm Low** & Last set value
- Press **SET** key to Set Alarm High Hy
  Display = **Alarm High Hy** & Last set value
- Press **SET** key to Set Alarm Low Hy
  Display = **Alarm Low Hy** & Last set value
- Press set key to repeat or Press enter key to save & Exit

Setting : Mode : Control Parameter
You can change **All value** by Increment & Decrement key
Press Enter key to exit & save from any step else go to next step

- Press **SET** key to Set HYSTRESIS (For ON/OFF Control Action)
  Display = HYSTRESIS & Last set value

- Press **SET** key to Set Cycle Time (For PID Control Action)
  Display = **Cycle Time** & Last set value
- Press **SET** key to Select Auto Tune function (For PID Control Action)
  Display = **Auto Tune** & No (You can select Yes By Pressing Increment Key)
- Press **SET** key to Correct Error
  Display = **C. Error** & Last set value

- Press **SET** key to Set Delay Time (For ON/OFF Control Action)
  Display = Delay Time & Last set value

- Press **SET** key to Set Auto tune Hysteresis
  Display = **Auto tune Hy** & Last set value
- Press **SET** key to Set Proportional Band
  Display = **Proportional Bnd** & Last set value
- Press **SET** key to Set Integral Time
  Display = **Integral Time** & Last set value
- Press **SET** key to Set Derivative Time
  Display = **Derivative Time** & Last set value
- Repeat above up to last step else press enter key to save & Exit

Setting : Mode : Delay Start Time
You can change **All value** by Increment & Decrement key
Press Enter key to exit & save from any step else go to next step

- Press **SET** key to Select Delay start time function
  Display = **Auto Start** & No
- Press **SET** key to Set Process start Date
  Display = **Process Start** & Dt
- Press **SET** key to Set Process start Time Hour
- Press **SET** key to Set Process start Time Minute
- Press **SET** key to Select Delay start time function
  Display = **Auto Start** & No
- Press Increment key to enable delay start function
  Display = **Auto Start** & Yes
- Press enter key to save
- Press enter key to start
- Press Enter key for 2 second to strop delay function

Setting : Mode : Data Logging

You can change **All value** by Increment & Decrement key
Press Enter key to exit & save from any step else go to next step

- Press **SET** key to Select On line/Off line Data logging
  Display = **Data Logging** & Last selection
- Press **SET** key to Select Off line Logging Time
  Display = **Logging Time** & Last selection
- Press **SET** key to See total number of Off line data Log
  Display = **Log No Of Data** & Value
- Press **SET** key to select Erase function for Logged Data
  Display = **Erase Log Data** & No
- Press **SET** key to Set Slave ID No
  Display = **Slave ID NO** & Last setting
- Repeat above up to last step else press enter key to save & Exit

Setting : Mode : RTC

You can change **All value** by Increment & Decrement key
Press Enter key to exit & save from any step else go to next step

- Press **SET** Key : Hour (Change value by Increment or Decrement key)
- Press **SET** Key : Minute (Change value by Increment or Decrement key)
- Press **SET** Key : Day (Change value by Increment or Decrement key)
- Press **SET** Key : Date (Change value by Increment or Decrement key)
- Press **SET** Key : Month (Change value by Increment or Decrement key)
- Press **SET** Key : Year (Change value by Increment or Decrement key)
- Press **SET** Key to Repeat or Press Enter Key to Save & Exit

- **Configure Mode**

Selection of control & sensor type

- **Short config link** (Back side terminal)
- **Press Increment + Enter key**

(D)

Display = **Sensor &** Last selection

- Press **SET** key to Set Minimum setting lock temperature
  Display = **Range Low** & Last set value
- Press **SET** key to Set Maximum setting lock Temperature
  Display = **Range High** & Last set value
- Press Set key to select **Control** function
  Display = **Control &** Last selection
- Press Set key to select **TYPE** of Output
  Display = **TYPE (HEAT, ON/OFF)**
  Press Set key to select **ALARM HIGH**
  Display = **ALARM HIGH**
  Press Set key to select **ALARM LOW**
  Display = **ALARM LOW**
  Press Set key to select **ALARM MUTE**
  Display = **MUTE**

- Press Enter key to save & exit else press set key to repeat above from step **(D)**
  Note:
- **Open config link** (Back side terminal)
- **Check all setting of step (A) & (B) or (C)**

DEFAULT TABLE

Pb	4.0
It	180
Dt	30
Hy	2
Ct	1